



## **THE SHOOTING TAPER SYSTEM - FACT SHEET**

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**(needs drawings and diagrams or photos throughout)**

The shooting taper or shooting head was developed on the West Coast of the United States by steelhead fly fishers who wished to achieve two major goals:

- ! more distance from the cast, and
- ! versatility in changing lines.

Steelheading often requires long distance casting, sometimes done all day long. In addition, conditions may be present on the same river that require using everything from floating lines to quick-sinking deepwater lines. The need for a long distance casting system coupled with a painless method of quickly changing lines led to the evolution of the shooting taper system.

The parts of the shooting taper system include:

1. Backing - standard braided dacron is used and attached to the running line with an Albright or similar knot
2. Running line is a thin level line, usually about 100 feet in length made from:

A. Monofilament - either round or oval, very limp and usually at least 20 pound test. It is often a bright color for visibility. Should be well stretched between each use.

! Advantages: shoots easily and slickly. Inexpensive.

! Disadvantages: difficult to control during drift, can slice fingers during fight with fast-moving fish.

B. Braided monofilament - usually available in 20 or 30 pound test and produced in bright colors.

! Advantages: limp, easy to cast, does not readily tangle.

! Disadvantages: difficult to control during drift, can burn hands during fight with fast moving fish.

C. Vinyl coated level line - a thin fly line available as floating, intermediate and sinking line.

! Advantages: easy to handle during fight with fish, or in cold weather. Floater is easier to control on the water. A floating or line can be chosen as the need arises.

! Disadvantages: not quite as easy to shoot as other lines, gives less distance as a result. Kinks more often. Stiffer in cold weather, ices up more easily.

3. Shooting Taper or Head - a short, single tapered piece of fly line matched to the weight and action of the fly rod. A standard "head" is usually between 28 and 35 feet in length. It can be floating, intermediate, full sink or even lead core. Heads usually have a small loop on either end to make changing them easier.

#### The Loop to Loop connection system

One of the advantages of the shooting taper is the ease with which lines can be changed to match changing conditions. Instead of buying and carrying the extra spools of line required by conventional fly fishing systems, the shooting taper allows the angler to carry a series of shooting heads, using one reel and spool and the same backing and running line for each head. By using the loop to loop connection system changing heads is a simple matter.

The loop to loop system requires loops to be tied or constructed at the end of the running line and shooting head. There are five methods of constructing loops:

A. Braided mono loop B can be purchased already made or built from pieces of braided running line. Simply run end line back through itself (using a bobbin threader, heavy needle or similar). Run fly line into double braid and secure with several wraps of nylon thread and glue (Pliobond).

B. Whipped fly line loop B fold end of fly line back onto itself and wind tightly with nylon thread, similar to wrapping a rod guide or whip finishing the working end of a rope. Coat windings with Pliobond.

C. Core loop - soak six or eight inches of fly line in acetone to remove vinyl coating. End of dacron core is then frayed and pulled back through itself (using bobbin threader or similar) to form loop. Coat with Pliobond.

D. Commercial braided leader loop, such as those made by Cortland. These are pre-made loops inserted on the end of the fly line, and then heat shrunk into place.

E. Tying loops in lines with knots, such as the figure 8, Albright loop, etc.. These are usually done in a pinch, since the knots do not travel smoothly through the rod guides and sometimes even hang up, thereby reducing line speed, increasing frustration and possibly losing fish. With loops securely in place, heads can be changed quickly and efficiently using a loop to loop connection. This connection is accomplished by using a girth hitch. Simply thread the loop of the line being attached through the loop on the reel, and then thread the other end of the line being attached through its own loop, pulling tight to snug connection. If attaching a fly line to a monofilament running line, tie the mono directly to the fly line loop with a clinch knot.

#### CREATING A SHOOTING TAPER SYSTEM

First, choose a backing and running line based on personal preference. (see discussion above) Full shooting taper systems and individual shooting tapers can be purchased pre-made from all major fly line manufacturers. Look for the SH or ST designation on the fly line packaging. Or, many anglers prefer tinkering with shooting tapers and making their own. Heads can be built from full lines by chopping a double taper in the middle of the line (making two heads) or cutting off the tapered section of a weight forward line. Lead-core heads (used for fast-sinking situations) can be built using sections of lead-core trolling line or other available coated lead lines. Cut the heads long and try them out, trimming them back until the preferred length is achieved. Loops can then be put on the lines.

Personal shooting taper systems are created based on the type of fishing done and the need for various types of fly lines. For example, a steelheader who typically encounters lots of different conditions will want to have a full array of shooting heads, from floating lines through intermediates, floating/sinking lines with varying lengths of sink tips, and sinking lines with sinking rates ranging from slow to fast. This could mean as many as nine or ten shooting heads! Couple this with a shooting head system for two or three different rod weights, and things can get confusing.

Mark the heads with a permanent marker indicating line weight. One method uses longer marks for five and shorter marks for one (e.g. - eight weight head: one long, three short). Some

anglers use color-coded markers to designate line type, or store each line in a color-coded Zip-loc bag. Wire plastic bag twisties, pipe cleaners or plastic loop fasteners (used to secure loops of electrical wire) will hold the loosely coiled shooting heads for storage.

### SHOOTING HEAD CASTING AND LINE CONTROL

The mono and vinyl running lines should be pulled off the reel and stretched before each use and a few times during a fishing day to reduce its "memory". It also helps to dress the lines often with a good fly line dressing (or Armorall Vinyl Protectant).

The cast with a shooting taper is always done with the head, loops and at least a few feet of running line or "overhang" out of the guides. The amount of overhang varies with each individual caster's ability and the characteristics of the rod and lines being used. After working out the head and overhang, an appropriate amount of running line is stripped off the reel, preferably into a shooting basket. The shooting head is backcast, loading the rod, and the forward cast started. As the shooting head passes the caster the running line is released from the basket, thereby "shooting" the line. Use as few backcasts as possible. The idea is to shoot the line all at once, not to work the line out through a series of false casts as would usually be done with a conventional fly casting system.

Don't be afraid to experiment using lines one, two or more weights over the rod's suggested weight. This may mean the difference between a difficult system and one you can really fish with!

Shooting tapers are not often successfully used for delicate presentations! What is gained in distance and ease of line change with the shooting taper system is often lost in line control. The shooting taper is usually "chucked" out and the slack running line gathered up quickly in loops or piled in a shooting basket with the line hand until a direct connection with the fly is achieved.